BRUHATH BANGALORE MAHANAGARA PALIKE

DASARHALLI ZONE

DIVISION:- DASARAHALLI DIVISION

NAME OF WORK: Improvements to Concrete Roads in KG Halli AK Colony and Surrounding area in Shettyhalli Ward No.12 Shettyhalli Sub Division.

Estimated Cost: 100.00 Lakhs

P code: P1878

Estimated Cost: 012-20-000041

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Name of Work:- Improvements to Concrete Roads in KG Halli AK Colony and Surrounding area in Shettyhalli Ward No.12 Shettyhalli Sub Division..

Est Cost Rs. 100.00 Lakhs

Job Code No 012-20-000041 P-1878

ತಾಂತ್ರಿಕ ವರದಿ

ಬೃಹತ್ ಬೆಂಗಳೂರು ಮಹಾನಗರ ಪಾಲಿಕೆ, ದಾಸರಹಳ್ಳಿ ವಲಯ, ಶೆಟ್ಟಿಹಳ್ಳಿ ಉಪವಿಭಾಗದ ವಾರ್ಡ್ ನಂ.12, ಶೆಟ್ಟಿಹಳ್ಳಿ ವ್ಯಾಪ್ತಿಯಲ್ಲಿನ Improvements to Concrete Roads in KG Halli AK Colony and Surrounding area in Shettyhalli Ward No.12 Shettyhalli Sub Division ಕಾಮಗಾರಿಯು 2020–21 ನೇ ಸಾಲಿನ ಬಿಬಿಎಂಪಿ ಆಯವ್ಯಯದ 24.10% ನ ಪರಿಶಿಷ್ಟ ಜಾತಿ ಮತ್ತು ಪರಿಶಿಷ್ಟ ಪಂಗಡ ಕಲ್ಯಾಣ ಯೋಜನೆಗಳಡಿ ಮೂಲಭೂತ ಸೌಕರ್ಯ ಕಾಮಗಾರಿಗಳ ಅನುದಾನದ ಲೆಕ್ಕಶೀರ್ಷಿಕೆ ಪಿ1878 ರ ಅನುದಾನದಲ್ಲಿ ರೂ.100.00 ಲಕ್ಷಗಳಿಗೆ ಕಾಮಗಾರಿ ಮಂಜೂರಾಗಿದ್ದು, ಕಾಮಗಾರಿ ಸಂಕೇತ 012-20-000041ರಲ್ಲಿ ದೊರೆತಿರುತ್ತದೆ.

ಮುಂದುವರೆದಂತೆ, 2020–21 ನೇ ಸಾಲಿನ ಬಿಬಿಎಂಪಿ ಆಯವ್ಯಯದ 24.10% ನ ಪರಿಶಿಷ್ಟ ಜಾತಿ ಮತ್ತು ಪರಿಶಿಷ್ಟ ಪಂಗಡ ಕಲ್ಯಾಣ ಯೋಜನೆಗಳಡಿ ಮೂಲಭೂತ ಸೌಕರ್ಯ ಕಾಮಗಾರಿಗಳ ಅನುದಾನದಡಿಯಲ್ಲಿ ರೂ100.00 ಲಕ್ಷಗಳನ್ನು ವಾರ್ಡ್ ನಂ.12 ರಲ್ಲಿ ಬರುವ ಕೆ.ಜಿ. ಹಳ್ಳಿಯ ಎ.ಕೆ. ಕಾಲೋನಿಯಲ್ಲಿನ ಸುತ್ತಮುತ್ತಲಿನ ರಸ್ತೆ ಅಭಿವೃದ್ಧಿ ಕಾಮಗಾರಿಯನ್ನು ಕೈಗೊಳ್ಳಲು ಅನುವು ಮಾಡಿಕೊಂಡಿದ್ದು, ಒಟ್ಟು ರೂ. 100.00 ಲಕ್ಷಗಳನ್ನು ಮೀಸಲಿರಿಸಲಾದ ಅನುದಾನವನ್ನು ಅನುವು ಮಾಡಿಕೊಂಡು ಈ ಕೆಳಕಂಡ ಅಂಶಗಳನ್ನು ಉಪಯೋಗಿಸಿಕೊಂಡು ಕ್ರಮವಹಿಸಲು ಅಂದಾಜಿನಲ್ಲಿ ಉದ್ದೇಶಿಸಲಾಗಿದೆ.

ಅಂದಾಜಿನಲ್ಲಿ ಈ ಕೆಳಕಂಡ ಅಂಶಗಳನ್ನು ಅಳವಡಿಸಿಕೊಳ್ಳಲಾಗಿದೆ.

1. Loosening, levelling and compacting original ground.
2. Compaction of original ground by mechanical means
3. Construction of embankment with approved material Gravel/Murrum with all lifts and leads.
4. Providing T.M.T. steel reinforcement for R.C.C. work
5. Earthwork in surface excavation for levelling and lowering the groun
6. Providing and laying in position plain cement concrete of Mix 1:3:6 with OPC @ 220kgs,
7. Providing and laying Design mix M25 with OPC cement @ 340kgs
8. Cement Concrete Pavements KSRRB M600-1.Providing and Constructing dry lean cement concrete mix CC 1:5:10
9. Providing and Constructing dry lean cement concrete mix CC 1:5:10 base
10. Constructing un-reinforced, plain cement concrete for pavements using Grade concrete M30 and etc.,

ಇತ್ಯಾದಿ ಮುಂತಾದ ಅಂಶಗಳನ್ನು ಅಳವಡಿಸಿಕೊಂಡು ಲೋಕೋಪಯೋಗಿ ಇಲಾಖೆಯ ಬೆಂಗಳೂರು ವೃತ್ತದ 2018–19 ನೇ ಸಾಲಿನ ದರಪಟ್ಟಿಯಂತೆ ರೂ. 100.00 ಲಕ್ಷಗಳಿಗೆ ಅತೀ ಸೂಕ್ಷ್ಮ ಸರಳತೆ ಅನುಸರಿಸಿ ಅಂದಾಜನ್ನು ತಯಾರಿಸಿ ಅಂದಾಜಿಗೆ ಆಡಳಿತಾತ್ಮಕ ಅನುಮೋದನೆ ಹಾಗೂ ತಾಂತ್ರಿಕ ಮಂಜೂರಾತಿಯನ್ನು ನೀಡಲು ಕೋರಲಾಗಿದೆ.

ಸಹಾಯಕ ಅಭಿಯಂತರರು
ವಾರ್ಡ್ ನಂ.12

ಸಹಾಯಕ ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರು
ಶೆಟ್ಟಿಹಳ್ಳಿ ಉಪವಿಭಾಗ

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BRUHATH BANGALORE MAHANAGARA PALIKE

Name of Work:-Improvements to Concrete Roads in KG Halli AK Colony and Surrounding area in Shettyhalli Ward No.12 Shettyhalli Sub Division.

DETAILED ESTIMATE

Job Code No: 012-20-000041 | **Pcode: P1878** | **Estimated Cost: 100.00 Lakhs**

Sl. No.	Description	Unit	No.	Length	Breadth	Depth	Quantity	Rate.	Amount
1	KSRRB M300-59.2. Loosening, levelling and compacting original ground supporting embankment to facilitate placement of first layer of embankment I subgrade, scarified to a depth of 150mm, mixed with water at OMC and then compacted by rolling so as to achieve minimum dry density as given in Table 300 2 for embankment/subgrade including HOM construction, labour etc.. complete as per specifications. MORTH Specification No. 305.3.4 (PW,P& IWTD SR 2018-19, Pg No 147 Item No.19.66)								
	3th cross	~~Sqm~~	1	233.00	5.40		1258.20		
	4th cross		1	134.00	4.55		609.70		
						Total	**1867.90**	**24.38**	**45539.40**
							Sqm		
2	KSRRB M300-14. Excavation for roadwork in all types of soil by mechanical means including cutting and loading to tippers, trimming bottom and side slopes, in accordance with requirements of lines, grades and cross sections, and transportation with a lead of 1.00 km and complete as per specifications. MORTH Specification No.301 (PW,P & IWTD SR 2018-19, Item No.19.14, Page No.143)								
	For ~~Drains~~	Roads							
	3th cross	~~Sqm~~	1	233.00	5.40	0.50	629.10		
	4th cross		1	134.00	4.55	0.50	304.85		
						Total	**933.95**	**43.46**	**40589.47**
							Cum		
3	KSRRB 300-58. Compaction of original ground by mechanical means including filling in depression occuring during rolling including cost of all labour, HOM complete as per specifications. MORTH I Chapter 3 (PW,P& IWTD SR 2018-19, Pg No 147 Item No.19.64)								
	3th cross	~~Sqm~~	1	233.00	5.40		1258.20		
	4th cross		1	134.00	4.55		609.70		
						Total	**1867.90**	**6.36**	**11879.84**
							Sqm		

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4	KSRRB M300-53. Construction of embankment with approved material Gravel/Murrum with all lifts and leads, transporting to site, spreading, grading to required slope and compacting to meet requirement Table 300-2 complete as per specifications, including cost of gravel I murrum, watering charges & compaction by vibratory roller to 95% of modified proctors density. MORTH Specification No. 305 (PW,P& IWTD SR 2018-19, Pg No 147 Item No.19.60)								
	3th cross	Sqm	1	233.00	5.40	0.25	314.55		
	4th cross		1	134.00	4.55	0.25	152.43		
						Total	**466.98**	**344.50**	**160872.89**
							Cum		
5	Construction of granular sub-base Grading-Vas Sub-base and drainage layer by providing coarse graded crushed stone aggregates of granite/ trap/basalt material, mixing in a mechanical mix plant at OMC, Carriage of mixed material to work site, spreading in uniform layers with motor grader on prepared surface and compacting with vibratory power roller to achieve the 98 % proctor density, complete as per specifications. Clause 401 of MORTH V Revision.								
	3th cross	Sqm	1	233.00	5.40	0.20	251.64		
	4th cross		1	134.00	4.55	0.20	121.94		
						Total	**373.58**	**1994.92**	**745262.21**
							Cum		
6	KSRRB M2200-6. Providing T.M.T. steel reinforcement for R.C.C. work including straightening, cutting, bending, hooking, placing in position, lapping and/or welding wherever required, tying with binding wire and anchoring to the adjoining members wherever necessary complete as per disign (laps, hooks and wastage shall not be measured and paid) cost of materials, labour, HOM complete as per specification. MORTH Specification No.1600 & 2200 -do- TMT Bars Fe 500 (PW,P& IWTD SR 2018-19, Pg No 18 Item No.4.46.2)								
	Qty same as Item No:9 & 55kg/mt.		55	281.23	15467.58	15.467579	15.47		
						Total	15.47	75223.96	**1163532.51**
							MT		
7	KSRB 2-1 : Earthwork in surface excavation for levelling and lowering the ground manually (Other than foundation of buildings, culverts, road drains and trenches of pipe lines and cables) and removing the excavated stuff to a distance not exceeding 50m and lift up to 1.5m, excavated surface levelled and neatly dressed, disposed earth to be levelled including breaking of clods and neatly Ordin ary soil (PW,P& IWTD SR 2018-19, Pg No 6 Item No.2.1)								
	For New RCC Drain								
	3rd Cross Road								
	0-123.2	RHS	1	123.20	1.00	0.90	110.88		

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	4th Cross Road								
	0-123.2	RHS	1	123.20	1.00	0.90	110.88		
	4th A Cross								
	0-136	RHS	1	136.00	1.00	0.90	122.40		
	4th to 4th A Cross Intermidiate Road								
	0-18.5	RHS	1	18.50	1.00	0.90	16.65		
	5th to 4th A Cross Intermidiate Road								
	0-31	RHS	1	31.00	1.00	0.90	27.90		
	5th Cross Road								
	0-233.6	RHS	1	233.60	1.00	0.90	210.24		
	10th Cross Road								
	0-132	RHS	1	132.00	1.00	0.90	118.80		
	10th Cross Road								
	0-59	RHS	1	59.00	1.00	0.90	53.10		
	3rd Cross Road								
	For New RCC Culvert								
	5th Cross		1	6.00	1.40	1.05	8.82		
	4th Cross		1	6.00	1.40	1.10	9.24		
	4th A Cross		1	6.00	1.40	1.10	9.24		
						Total	**798.15**	**263.94**	**210663.71**
							~~Cum~~ Sqmt		
8	KSRB 4-1.7: Providing and laying in position plain cement concrete of Mix 1:3:6 with OPC @ 220kgs, with 20mm and down size graded granite metal coarse aggregates @0.69 cum and fine aggregtes @ 0.56cum, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation, plinth and cills, including cost of all materials, labour, HOM curing complete as per specifications. Specification No. KBS 4.1, 4.2 (PW,P& IWTD SR 2018-19 P-13, I-4.7)								
	For New RCC Drain								
	3rd Cross Road								
	0-108	RHS	1	108.00	1.00	0.15	16.20		
	4th Cross Road								
	0-123.2	RHS	1	123.20	1.00	0.15	18.48		
	4th A Cross								
	0-156	RHS	1	156.00	1.00	0.15	23.40		
	4th to 4th A Cross Intermidiate Road								
	0-18.4	RHS	1	18.40	1.00	0.15	2.76		

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	0-132	RHS	1	132.00	1.00	0.15	19.80		
			2	132.00	0.15	0.55	21.78		
	10th Cross Road								
	0-59	RHS	1	59.00	1.00	0.15	8.85		
			2	59.00	0.15	0.55	9.74		
	For New RCC Culvert								
	5th Cross		1	6.00	1.40	0.15	1.26		
			2	6.00	0.25	0.60	1.80		
	4th Cross		1	6.00	1.40	0.15	1.26		
			2	6.00	0.25	0.60	1.80		
	4thACross		1	6.00	1.40	0.15	1.26		
			2	6.00	0.25	0.60	1.80		
						Total	**281.23**	**5775.38**	**1624202.61**
							Cum		
10	Providing and fixing precast reinforced cement concrete covering slabs of 10cm thick made out of M25 with OPC cement @340kgs per cum , 20mm and down size graded granite metal corse aggregtes @ 0.70cm and fine aggregates @ 0.74 cum with super plasticizers, machine mixed , inclding providing and removing centering, shuttering strutting propping etc., for edges of slab with TMT steel (Fe500) cost & reinforcement charges inclding finishing as required with cost of reinforcement etc., complete as directed by engineer incharge of the work								
	For New RCC Drain								
	3rd Cross Road								
	0-108	RHS	1	108.00	0.90		97.20		
	4th Cross Road						0.00		
	0-123.2	RHS	1	123.20	0.90		110.88		
	4th A Cross						0.00		
	0-156	RHS	1	156.00	0.90		140.40		
	4th to 4th A Cross Intermidiate Road						0.00		
	0-18.5	RHS	1	18.50	0.90		16.65		
	5th to 4th A Cross Intermidiate						0.00		
	0-31	RHS	1	31.00	0.90		27.90		
	5th Cross Road						0.00		
	0-233.6	RHS	1	233.60	0.90		210.24		
	10th Cross Road						0.00		
	0-132	RHS	1	132.00	0.90		118.80		

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	10th Cross Road						0.00		
	0-59	RHS	1	59.00	0.90		53.10		
					Total Qty		775.17	1615.00	1251899.55
	App.Rate	1615.00					Sqm		
11	**CONCRETE PAVEMENT** KSRRB M600- Cement Concrete Pavements KSRRB M600-1.Providing and Constructing dry lean cement concrete mix CC 1:5:10 base with OPC 25mm and down size graded granite metal coarse aggregate at 0.86cum and fine aggregates @0.58cum over a prepared sub-base, coarse and fine aggregate conforming to IS: 383-2016,aggregate cement ratio not to exceed 15:1, Aggregate gradation after blending to be as per Table 600-1 ,optimum moisture content to be determined during trial length construction, concrete strength not to be less than 10 Mpa at 7 days, mixed in a hatching plant, transported to site,laid with a paver, compacting with 8-10 tonnes vibratory roller, finishing and curing complete as per specifications. Clause 601of MORTH V Revision and IS 456 Table-5 -do- with OPC at 150 kg/cum and coarse aggregate 0.86cum, fine aggregate 0.58cum using Concrete Batch mix Plant at 75 cum/hr capacity with fixed form paver. (PW,P& IWTD SR 2018-19 P- 174, I-22.1.2)								
	5th cross	Sqm	1	233.00	5.40	0.15	188.73		
	4th cross		1	134.00	4.55	0.15	91.46		
						Total	**280.19**	**3944.51**	**1105192.53**
							Cum		

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12	Constructing un-reinforced, plain cement concrete for pavements using Grade concrete M30 over a prepared base with OPC coarse aggregate at 0.69 cum, fine aggregates at 0.46 cum,Coarse and fine aggregate conforming to18:383-2016, with Superplastizer at 3 Its conforming to IS 9103-2008. mixed in a concrete mixer of not less than 0.6 cum capacity and appropriate weigh batcher as per approved mix design, laid in approved fixed side form work (steel channel, laying and fixing of 125 micron thick polythene film, wedges, steel plates including levelling the form work as per drawing). & Spreading the concrete with shovels, rackers compacted using needle, screed and plate vibrator and finished with floaters in a continuous operation including provision of contraction, expansion, construction and longitudinal joints, including groove cutting charges, joint filler, separation membrane of impermiable plastic sheet of 125 micron, sealant primer, joint sealant, admixtures as approved, curing compound, finishing to lines and grades,textured with texturing machine, and curing including cost of all materials, labour,hire charges of machineries,all lead & lift charges etc., complete as per specifications. -do- with OPC at 360 kg/cum and coarse aggregate 0.69cum, fine aggregate 0.46cum. (PW,P& IWTD SR 2018-19, Pg No 176 Item No. 22.6.1)								
	3th cross		1	233.00	5.40	0.15	188.73		
	4th cross		1	134.00	4.55	0.15	91.46		
						Total	280.19	5354.02	1500116.09
							Cum		
								Total	8619581.32
								KRIDL Charges @ 4 % On Construction cost	344783.25
								GST at 12% of Tender Amount	1034349.76
								Miscellaneous & unforeseen charges	1285.67
								GRAND TOTAL	10000000.00

CERTIFICATE:

i This work comes within BBMP limits

ii Certified that Personaly Inspected the Work Spot.

iii Certified that the estimate is prepared based on CSR of

iv Estimate is prepared Making Use of essential item of work as per site Conditions in safest way of Execution in most economical way.

v This work is not included in any other program of work.

Assistant Engineer
Ward No.12
BBMP, Bengaluru

Assistant Executive Engineer
Shettyhalli Sub Division
BBMP, Bengaluru

Executive Engineer
Dasarahalli Division
BBMP, Bengaluru

ADMINISTRATIVELY SANCTIONED FOR ... One hundred lakhs Only ... 100.00 lakhs ... Under the Head of Account ... P-1878 ... Work ... Registered as no EE(D.D.)/AS...73.../...Subject to conditions contained in Enclosed Memo No. 73/05/04/2020-21 Dt. 05/06/2020

JE/AE. Exe. Eng (DASARAHALLI) BBMP

Technically Sanctioned For Rs: 100.00 lakhs. Rs. In Words 100.00 lakhs (One Hundred lakhs Only. Under P-1878 Job Code No. 012-20-000041 Registered as SE No. 88/2020-21 P-32 Subject to conditions contained in Enclosed Memo No. 88/2020-21 Dt. 28.08.2020

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